# **Complete Summary**

# **GUIDELINE TITLE**

Nursing care of dyspnea: the 6th vital sign in individuals with chronic obstructive pulmonary disease (COPD).

# BIBLIOGRAPHIC SOURCE(S)

Registered Nurses Association of Ontario (RNAO). Nursing care of dyspnea: the 6th vital sign in individuals with chronic obstructive pulmonary disease (COPD). Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 136 p. [227 references]

#### **GUIDELINE STATUS**

This is the current release of the guideline.

# **COMPLETE SUMMARY CONTENT**

**SCOPE** 

METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
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QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE
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CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY

# **SCOPE**

# DISEASE/CONDITION(S)

- Dyspnea associated with chronic obstructive pulmonary disease (COPD)
- COPD

**DISCLAIMER** 

# **GUIDELINE CATEGORY**

Evaluation Management Screening Treatment

# CLINICAL SPECIALTY

Family Practice Internal Medicine Nursing Pulmonary Medicine

# INTENDED USERS

Advanced Practice Nurses Nurses

# GUIDELINE OBJECTIVE(S)

To address the nursing assessment and management of stable, unstable and acute dyspnea associated with chronic obstructive pulmonary disease (COPD)

# TARGET POPULATION

- Patients with dyspnea associated with chronic obstructive pulmonary disease (COPD)
- Adults with dyspnea who have a history of smoking and who are over the age of 40

# INTERVENTIONS AND PRACTICES CONSIDERED

# Evaluation/Screening

- 1. Respiratory assessment, including vital signs, pulse oximetry, and chest auscultation
- 2. Identification of stable and unstable dyspnea, and acute respiratory failure
- 3. Screening for chronic obstructive pulmonary disease (COPD) in adults over 40 who have a history of smoking
- 4. Advocating for spirometry testing in at-risk individuals

# Management/Treatment

- 1. Implementation of appropriate nursing interventions, including medications, controlled oxygen therapy, ventilation modalities, and strategies for secretion clearance, energy conserving, relaxation, nutrition, and breathing retraining
- 2. Remaining with patient during episodes of acute respiratory distress
- 3. Implementation of smoking cessation strategies
- 4. Administration of the following pharmacological agents as prescribed: bronchodilators, oxygen, corticosteroids, antibiotics, psychotropics, opioids
- 5. Assessment of inhaler technique and coaching, if required
- 6. Discussion of medications with patients
- 7. Recommendation of annual influenza vaccination and pneumococcal vaccine (chronic obstructive pulmonary disease patients) as appropriate
- 8. Administration of oxygen therapy as prescribed
- 9. Support of disease self-management strategies including action plan development and end-of-life decision making directives

- 10. Promotion of exercise training and pulmonary rehabilitation as appropriate
- 11. Patient education and referrals, if necessary

# MAJOR OUTCOMES CONSIDERED

- Validity and reliability of dyspnea assessment tools
- Effectiveness of intervention strategies at optimizing self-management of chronic obstructive pulmonary disease (COPD), reducing signs and symptoms of dyspnea, improving dyspnea scores, promoting comfort, improving quality of life and functional health status

# METHODOLOGY

# METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources) Searches of Electronic Databases Searches of Unpublished Data

# DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A database search for existing chronic obstructive pulmonary disease guidelines was conducted by a university health sciences library. An initial search of the Medline, Embase, and CINAHL databases for guidelines and articles published from January 1, 1995 to December 2003 was conducted using the following search terms: "chronic obstructive pulmonary disease," "COPD," "chronic obstructive lung disease," "COLD," "chronic bronchitis," "emphysema," "family caregivers," "coping with chronic illness," "oxygen devices," "rehabilitation," "assessing control," "medications," "randomized controlled trials," "systematic reviews," "practice guideline(s)," "clinical practice guideline(s)," "standards," "consensus statement(s)," "consensus," "evidence based guidelines," and "best practice guidelines."

One individual searched an established list of Web sites for content related to the topic area. This list of sites, reviewed and updated in October 2002, was compiled based on existing knowledge of evidence-based practice Web sites, known guideline developers, and recommendations from the literature. Presence or absence of guidelines was noted for each site searched as well as date searched. The Web sites at times did not house a guideline but directed to another website or source for guideline retrieval. Guidelines were either downloaded if full versions were available or were ordered by phone/e-mail.

A Web site search for existing chronic obstructive pulmonary disease guidelines was conducted via the search engine "Google," using the search terms identified above. One individual conducted this search, noting the results of the search term results, the Web sites reviewed, date, and a summary of the findings. The search results were further critiqued by a second individual who identified guidelines and literature not previously retrieved.

Additionally, panel members were already in possession of a few of the identified guidelines. In some instances, a guideline was identified by panel members and

not found through the previous search strategies. These were guidelines that were developed by local groups or specific professional associations and had not been published to date.

This above search method revealed 13 guidelines, several systematic reviews, and numerous articles related to chronic obstructive pulmonary disease.

The final step in determining whether the clinical practice guideline would be critically appraised was to have two individuals screen the guidelines based on the following criteria. These criteria were determined by panel consensus:

- Guideline was in English, international in scope
- Guideline dated no earlier than 1997
- Guideline was strictly about the topic area.
- Guideline was evidence-based (e.g., contained references, description of evidence, sources of evidence).
- Guideline was available and accessible for retrieval.

Nine guidelines met the screening criteria and were critically appraised using the Appraisal of Guidelines for Research and Evaluation (AGREE Collaboration, 2001) instrument.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

# METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

La Evidence obtained from meta-analysis or systematic review of randomized controlled trials

Ib Evidence obtained from at least one randomized controlled trial

II a Evidence obtained from at least one well-designed controlled study without randomization

IIb Evidence obtained from at least one other type of well-designed quasiexperimental study, without randomization

III Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies

IV Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities

# METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses Systematic Review with Evidence Tables

# DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

# METHODS USED TO FORMULATE THE RECOMMENDATIONS

**Expert Consensus** 

# DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

In January of 2004, a panel of nurses with expertise in practice, education, and research related to chronic obstructive pulmonary disease was established by the Registered Nurses Association of Ontario (RNAO). At the onset, the panel discussed and came to consensus on the scope of the best practice guideline.

The panel members divided into subgroups to undergo specific activities using the short-listed guidelines, other literature, and additional resources for the purpose of drafting recommendations for nursing interventions. This process yielded a draft set of recommendations. The panel members as a whole reviewed the recommendations, discussed gaps, available evidence, and came to a consensus on a draft guideline.

# RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

# COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

# METHOD OF GUIDELINE VALIDATION

External Peer Review Internal Peer Review

# DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The draft guideline was submitted to a set of external stakeholders for review and feedback of the content. It was also critiqued using the Appraisal of Guidelines for Research and Evaluation Instrument (AGREE) instrument. An acknowledgement of

these reviewers is provided at the front of the original guideline document. Stakeholders represented health care consumers, various health care disciplines, as well as a professional association. External stakeholders were provided with specific questions for comment, as well as the opportunity to give overall feedback and general impressions. The results were compiled and reviewed by the development panel. Discussion and consensus resulted in revision to the draft document prior to publication.

#### RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

The levels of evidence supporting the recommendations (Ia, Ib, IIa, IIb, III, IV) are defined at the end of the "Major Recommendations" field.

# Practice Recommendations

Assessment

Recommendation 1.0

Nurses will acknowledge and accept the patients' self-report of dyspnea.

(Level of Evidence = IV)

Recommendation 1.1

All individuals identified as having dyspnea related to chronic obstructive pulmonary disease (COPD) will be assessed appropriately.

Respiratory assessment should include:

- Level of dyspnea
  - Present level of dyspnea
  - Present dyspnea should be measured using a quantitative scale such as a visual analogue or numeric rating scale.
- Usual level of dyspnea
  - Usual dyspnea should be measured using a quantitative scale such as the Medical Research Council (MRC) Dyspnea Scale.
- Vital signs
- Pulse oximetry
- Chest auscultation
- Chest wall movement and shape/abnormalities
- Presence of peripheral edema
- Accessory muscle use
- Presence of cough and/or sputum
- Ability to complete a full sentence
- Level of consciousness

(Level of Evidence = IV)

#### Recommendation 1.2

Nurses will be able to identify stable and unstable dyspnea and acute respiratory failure.

(Level of Evidence = IV)

#### Recommendation 1.3

Every adult with dyspnea who has a history of smoking and is over the age of 40 should be screened to identify those most likely to be affected by COPD. As part of the basic dyspnea assessment, nurses should ask every patient:

- Do you have progressive activity-related shortness of breath?
- Do you have a persistent cough and sputum production?
- Do you experience frequent respiratory tract infections?

(Level of Evidence = IV)

#### Recommendation 1.4

For patients who have a history of smoking and are over the age of 40, nurses should advocate for spirometric testing to establish early diagnosis in at risk individuals.

(Level of Evidence = IV)

COPD Dyspnea Interventions/Education

# Recommendation 2.0

Nurses will be able to implement appropriate nursing interventions for all levels of dyspnea including acute episodes of respiratory distress:

- Acknowledgement and acceptance of patients' self-report of present level of dyspnea
- Medications
- Controlled oxygen therapy
- Secretion clearance strategies
- Non-invasive and invasive ventilation modalities
- Energy conserving strategies
- Relaxation techniques
- Nutritional strategies
- Breathing retraining strategies

(Level of Evidence = IV)

# Recommendation 2.1

Nurses must remain with patients during episodes of acute respiratory distress.

(Level of Evidence = IV)

#### Recommendation 2.2

Smoking cessation strategies should be instituted for patients who smoke:

- Refer to Registered Nurses Association of Ontario (RNAO) guideline, Integrating Smoking Cessation into Daily Nursing Practice.
- Use of nicotine replacement and other smoking cessation modalities during hospitalization for acute exacerbation

(Level of Evidence = IV)

Medications

Recommendation 3.0

Nurses should provide appropriate administration of the following pharmacological agents as prescribed:

- Bronchodilators (Level of Evidence = 1b)
  - Beta 2 Agonists
  - Anticholinergics
  - Methylxanthines
- Oxygen (Level of Evidence = 1b)
- Corticosteroids (Level of Evidence = 1b)
- Antibiotics (Level of Evidence = 1a)
- Psychotropics (Level of Evidence = IV)
- Opioids (Level of Evidence = IV)

# Recommendation 3.1

Nurses will assess patients' inhaler device technique to ensure accurate use. Nurses will coach patients with sub-optimal technique in proper inhaler device technique.

(Level of Evidence = Ia)

Recommendation 3.2

Nurses will be able to discuss the main categories of medications with their patients including:

- Trade and generic names
- Indications
- Doses
- Side effects
- Mode of administration
- Pharmacokinetics
- Nursing considerations

(Level of Evidence = IV)

Vaccination

Recommendation 3.3

Annual influenza vaccination should be recommended for individuals who do not have a contraindication.

(Level of Evidence = Ia)

Recommendation 3.4

COPD patients should receive a pneumococcal vaccine at least once in their lives (high risk patients every 5 to 10 years).

(Level of Evidence = IV)

Oxygen Therapy

Recommendation 4.0

Nurses will assess for hypoxemia/hypoxia and administer appropriate oxygen therapy for individuals for all levels of dyspnea.

(Level of Evidence = Ib-IV)

Disease Self-Management

Recommendation 5.0

Nurses should support disease self-management strategies including:

- Action plan development (Level of Evidence = 1b)
  - Awareness of baseline symptoms and activity level
  - Recognition of factors that worsen symptoms
  - Early symptom recognition of acute exacerbation/infection
- End-of-life decision-making/advanced directives (Level of Evidence = IV)

Recommendation 5.1

Nurses should promote exercise training.

(Level of Evidence = IV)

Recommendation 5.2

Nurses should promote pulmonary rehabilitation.

(Level of Evidence = Ia)

# **Education Recommendation**

#### Recommendation 6.0

Nurses working with individuals with dyspnea related to COPD will have the appropriate knowledge and skills to:

- · Recognize the importance of individual's self report of dyspnea
- Provide COPD patient education including:
  - Smoking cessation strategies
  - Pulmonary rehabilitation/exercise training
  - Secretion clearance strategies
  - Breathing retraining strategies
  - Energy conserving strategies
  - Relaxation techniques
  - Nutritional strategies
  - Role/rationale for oxygen therapy
  - Role/rationale for medications
  - Inhaler device techniques
  - Disease self-management and action plans
  - End-of-life issues
- Conduct appropriate referrals to physician and community resources

(Level of Evidence = IV)

# Organization & Policy Recommendations

Organization & Policy

Recommendation 7.0

Organizations must institutionalize dyspnea as the 6th vital sign.

(Level of Evidence = IV)

Recommendation 7.1

Organizations need to have in place COPD educators to teach both nurses and patients.

(Level of Evidence = IV)

Recommendation 7.2

Organizations need to ensure that a critical mass of health professionals are educated and supported to implement this guideline in order to ensure sustainability.

(Level of Evidence = IV)

#### Recommendation 7.3

Organizations will ensure sufficient nursing staff to provide essential care, safety, and support for individuals with all levels of dyspnea.

(Level of Evidence = IV)

#### Recommendation 7.4

Organizations should have available sample medication delivery devices, spacer devices, sample templates of action plans, visual analogue scales, numeric rating scales, Medical Research Council (MRC) scales, and patient education materials.

(Level of Evidence = IV)

#### Recommendation 7.5

Organizations need to have in place best practice guideline specific strategies to facilitate implementation. Organizations may wish to develop a plan for implementation that includes:

- A process for the assessment of the patient population (e.g., numbers, clinical diagnostic practices, co-morbidities, average length of stay) of individuals usually cared for in their institution that are living with dyspnea related to COPD.
- A process for the assessment of documentation practices related to the monitoring of dyspnea (usual and present dyspnea and dyspnea related therapies (e.g., S<sub>P</sub>O<sub>2</sub>).
- A process for the evaluation of the changes in the patient population and documentation strategies pre- and post-implementation.
- A process for the assessment of policies supporting the care of individuals living with dyspnea related to COPD.

(Level of Evidence = IV)

### Recommendation 7.6

Organizations need to develop specific pre-implementation and outcome markers to monitor the impact of the implementation of this guideline on the care of individuals with dyspnea related to COPD. Organizations may wish to evaluate:

- Nursing knowledge base pre- and post-implementation.
- Length of time between acute exacerbations of COPD (AECOPD) for specific individuals (perhaps globally represented by the number of acute care admissions and/or use of acute care resources over time pre- and post-implementation).
- Development of documentation strategies to monitor and enhance care of individuals living with dyspnea related to COPD (integration of usual and present dyspnea on vital sign records within the institution).
- Development of policies institutionalizing an education program for nurses caring for individuals living with dyspnea related to COPD.

(Level of Evidence = IV)

Recommendation 7.7

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support. Organizations may wish to develop a plan for implementation that includes:

- An assessment of organizational readiness and barriers to education
- Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process
- Dedication of a qualified individual to provide the support needed for the education and implementation process
- Ongoing opportunities for discussion and education to reinforce the importance of best practices
- Opportunities for reflection on personal and organizational experience in implementing guidelines

In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the Toolkit: Implementation of Clinical Practice Guidelines, based on available evidence, theoretical perspectives and consensus. The RNAO strongly recommends the use of this Toolkit for guiding the implementation of the best practice guideline on Nursing Care of Dyspnea: The 6th Vital Sign in Individuals with Chronic Obstructive Pulmonary Disease (COPD).

(Level of Evidence = IV)

Programs/Services

Recommendation 8.0

Pulmonary rehabilitation programs must be available for individuals with COPD to enhance quality of life and reduce health care costs.

(Level of Evidence = Ia)

Recommendation 8.1

Palliative care services must be available for individuals living with COPD and their caregivers.

(Level of Evidence = III)

Recommendation 8.2

Nursing research related to interventions for individuals with COPD must be supported.

(Level of Evidence = IV)

#### Recommendation 8.3

All nursing programs should include dyspnea associated with COPD as one context for learning core curricula concepts.

(Level of Evidence = IV)

Recommendation 8.4

Funding regulations for oxygen therapy must be revisited to include those individuals with severe dyspnea, reduced ventilatory capacity, and reduced exercise tolerance who do not qualify under the current criteria.

(Level of Evidence = IV)

# Definitions:

Levels of Evidence

La Evidence obtained from meta-analysis or systematic review of randomized controlled trials

Ib Evidence obtained from at least one randomized controlled trial

II a Evidence obtained from at least one well-designed controlled study without randomization

IIb Evidence obtained from at least one other type of well-designed quasiexperimental study, without randomization

III Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies

IV Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities

# CLINICAL ALGORITHM(S)

A clinical algorithm is provided in the original guideline document for a chronic obstructive pulmonary disease (COPD) decision tree.

# EVIDENCE SUPPORTING THE RECOMMENDATIONS

# TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is identified and graded for each recommendation (see "Major Recommendations").

# BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

# POTENTIAL BENEFITS

- Appropriate assessment and management of patients with dyspnea associated with chronic obstructive pulmonary disease
- Symptom relief
- Optimization of patient self-management of chronic obstructive pulmonary disease (COPD)
- Improved patient comfort, quality of life, and functional health status
- Nurses, other health care professionals and administrators who are leading and facilitating practice changes will find this document valuable for the development of policies, procedures, protocols, educational programs, assessments, and documentation tools.

#### POTENTIAL HARMS

Adverse effects of pharmacological agents. Common side effects are listed in Appendix L in the original guideline document.

# CONTRAINDICATIONS

#### **CONTRAINDICATIONS**

- Currently available evidence does not support the clinical use of nebulized opioids; however, some clinicians utilize opioids to treat the symptom of dyspnea in end-stage chronic obstructive pulmonary disease (COPD). Opioid use is contraindicated in COPD management due to the potential respiratory depression and worsening hypercapnia.
- Tiotropium bromide is contraindicated in patients with hypersensitivity to atropine or its derivatives or lactose monohydrate.

# QUALIFYING STATEMENTS

# QUALIFYING STATEMENTS

- This nursing best practice guideline is a comprehensive document providing resources necessary for the support of evidence-based nursing practice. The document needs to be reviewed and applied, based on the specific needs of the organization or practice setting/environment, as well as the needs and wishes of the client. Guidelines should not be applied in a "cookbook" fashion but used as a tool to assist in decision making for individualized client care, as well as ensuring that appropriate structures and supports are in place to provide the best possible care.
- These best practice guidelines are related only to nursing practice and not intended to take into account fiscal efficiencies. These guidelines are not binding for nurses and their use should be flexible to accommodate client/family wishes and local circumstances. They neither constitute a liability nor discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor

the Registered Nurses Association of Ontario (RNAO) give any guarantee as to the accuracy of the information contained in them, nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omission in the contents of this work. Any reference throughout the document to specific pharmaceutical products as examples does not imply endorsement of any of these products.

- It is acknowledged that individual competencies of nurses vary between nurses and across categories of nursing professionals (registered nurses [RNs] and registered practical nurses [RPNs]) and are based on knowledge, skills, attitudes and judgement enhanced over time by experience and education. It is expected that individual nurses will perform only those aspects of care for which they have received appropriate education and experience. Both registered nurses and registered practical nurses should seek consultation in instances where the patient's care needs surpass the individual nurse's ability to act independently.
- Although this guideline contains recommendations for RNs and RPNs, caring
  for individuals with chronic obstructive pulmonary disease is an
  interdisciplinary endeavour. It is acknowledged that effective care depends on
  a coordinated interdisciplinary approach incorporating ongoing communication
  between health professionals and patients. Personal preferences and unique
  needs as well as the personal and environmental resources of each individual
  patient must always be kept in mind.

# IMPLEMENTATION OF THE GUIDELINE

# DESCRIPTION OF IMPLEMENTATION STRATEGY

Best practice guidelines can only be successfully implemented if there are: adequate planning, resources, organizational and administrative support as well as appropriate facilitation. Registered Nurses Association of Ontario (RNAO), through a panel of nurses, researchers and administrators has developed the Toolkit: Implementation of Clinical Practice Guidelines based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of any clinical practice guideline in a health care organization.

The Toolkit provides step-by-step directions to individuals and groups involved in planning, coordinating, and facilitating the guideline implementation. Specifically, the Toolkit addresses the following key steps in implementing a guideline:

- 1. Identifying a well-developed, evidence-based clinical practice guideline
- 2. Identification, assessment and engagement of stakeholders
- 3. Assessment of environmental readiness for guideline implementation
- 4. Identifying and planning evidence-based implementation strategies
- 5. Planning and implementing evaluation
- 6. Identifying and securing required resources for implementation

Implementing guidelines in practice that result in successful practice changes and positive clinical impact is a complex undertaking. The Toolkit is one key resource for managing this process.

# **Evaluation and Monitoring**

Organizations implementing the recommendations in this nursing best practice guideline are encouraged to consider how the implementation and its impact will be monitored and evaluated. A table found in the original guideline document, based on a framework outlined in the Registered Nurses Association of Ontario Toolkit: Implementation of Clinical Practice Guidelines (2002) illustrates some indicators for monitoring and evaluation.

# Implementation Strategies

The Registered Nurses Association of Ontario and the guideline development panel have compiled a list of implementation strategies to assist health care organizations or health care disciplines who are interested in implementing this guideline. See the original guideline document for a summary of strategies.

# IMPLEMENTATION TOOLS

Chart Documentation/Checklists/Forms Clinical Algorithm Quick Reference Guides/Physician Guides Tool Kits

For information about <u>availability</u>, see the "Availability of Companion Documents" and "Patient Resources" fields below.

# INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

**IOM CARE NEED** 

Getting Better Living with Illness

IOM DOMAIN

Effectiveness

# IDENTIFYING INFORMATION AND AVAILABILITY

# BIBLIOGRAPHIC SOURCE(S)

Registered Nurses Association of Ontario (RNAO). Nursing care of dyspnea: the 6th vital sign in individuals with chronic obstructive pulmonary disease (COPD). Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 136 p. [227 references]

**ADAPTATION** 

The Registered Nurses Association of Ontario (RNAO) panel selected the following quidelines to adapt and modify for the current quideline:

- Clinical Epidemiology and Health Service Evaluation Unit (1999). Evidence based guidelines Royal Melbourne Hospital -- Hospital management of an acute exacerbation of chronic obstructive pulmonary disease. Melbourne: National Health and Medical Research Council.
- Institute for Clinical Systems Improvement (2003). Health care guideline: Chronic obstructive pulmonary disease. Institute for Clinical Systems Improvement [Electronic version].
- McKenzie, D. K., Frith, P. A., Burdon, J. G. W., & Town, I. (2003). The COPDX Plan: Australian and New Zealand guidelines for the management of chronic obstructive pulmonary disease 2003. Medical Journal of Australia, 178(6 Suppl), S1-S40.
- O'Donnell, D. E., Aaron, S., Bourbeau, J., Hernandez, P., Marciniuk, D., Balter, M. et al. (2003). Canadian Thoracic Society recommendations for management of chronic obstructive pulmonary disease 2003. Canadian Respiratory Journal, 10(Suppl. A), 11A-65A.
- Pauwels, R. A., Buist, A. S., Jenkins, C. R., Hurd, S. S., & the GOLD Scientific Committee (2001). Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease: National Heart, Lung, and Blood Institute and World Health Organization Global Initiative for Chronic Obstructive Lung Disease (GOLD): Executive summary. Respiratory Care, 46(8), 798-825.
- Veterans Health Administration (2000). VHA/DOD clinical practice guideline for the management of chronic obstructive pulmonary disease. Clinical Practice Guidelines Office of Quality and Performance [Electronic version].

DATE RELEASED

2005 Mar

GUIDELINE DEVELOPER(S)

Registered Nurses Association of Ontario - Professional Association

SOURCE(S) OF FUNDING

Funding was provided by the Ontario Ministry of Health and Long Term Care.

**GUIDELINE COMMITTEE** 

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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# FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Declarations of interest and confidentiality were made by all members of the guideline development panel. Further details are available from the Registered Nurses Association of Ontario.

# **GUIDELINE STATUS**

This is the current release of the guideline.

#### GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Registered Nurses Association of Ontario (RNAO) Web site.

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines Project, 158 Pearl Street, Toronto, Ontario M5H 1L3.

# AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Summary of recommendations. Nursing care of dyspnea: the 6th vital sign in individuals with chronic obstructive pulmonary disease (COPD). Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 5 p. Electronic copies: Available in Portable Document Format (PDF) from the Registered Nurses Association of Ontario (RNAO) Web site.
- Toolkit: implementation of clinical practice guidelines. Toronto (ON):
   Registered Nurses Association of Ontario (RNAO); 2002 Mar. 88 p. Electronic
   copies: Available in Portable Document Format (PDF) from the <u>Registered</u>
   Association of Ontario (RNAO) Web site.
- A variety of implementation tools, including a sample COPD assessment form and a plan of action for managing acute exacerbations of COPD, are available in the appendices to the original guideline document, available from the Registered Nurses Association of Ontario (RNAO) Web site.

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines Project, 158 Pearl Street, Toronto, Ontario M5H 1L3.

# PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on June 3, 2005. The updated information was verified by the guideline developer on June 21, 2005.

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